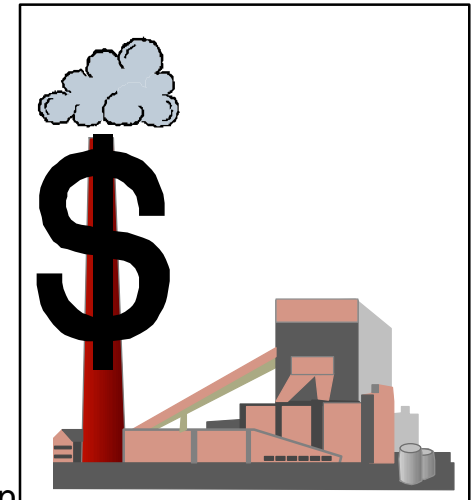
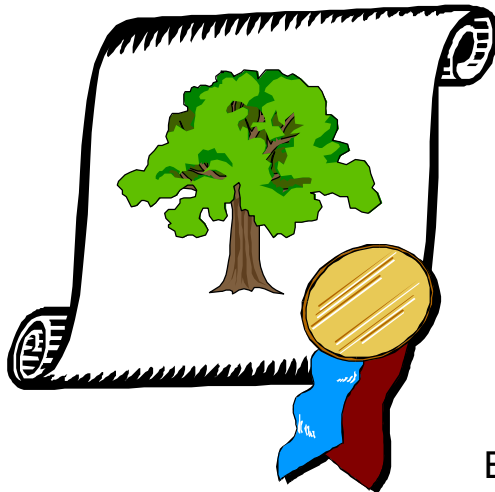




# Green Tags & Emission Credits: A Happy Marriage?

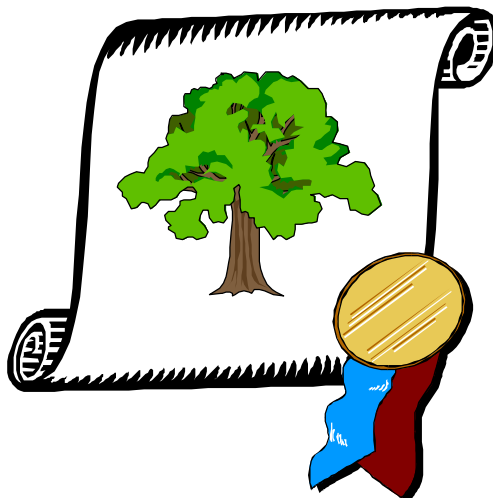


Rick Morgan  
EPA Climate Protection Partnerships Division  
(202) 564-9143, [morgan.rick@epa.gov](mailto:morgan.rick@epa.gov)  
December 12, 2000

# Green Tags & Emission Credits: Summary



- ◆ Relationship of green tags to emissions trading
- ◆ Future of cap & trade mechanisms
- ◆ Technical & policy issues for green tags
- ◆ Role of EPA in promoting green power markets





# Green Tags: An Exciting Concept

- ◆ Consumer's “right to know”
- ◆ Consistent with competitive electricity markets
- ◆ Potential driver for investment in renewables
- ◆ Public education tool
  - » draw attention to electricity's environmental impacts
  - » certificate represents value of clean power
  - » provide customer choice



*If we can trade emissions, why not “green” stuff, too?*



# Renewables & Emissions Trading

*Credits for renewables are very rare!*

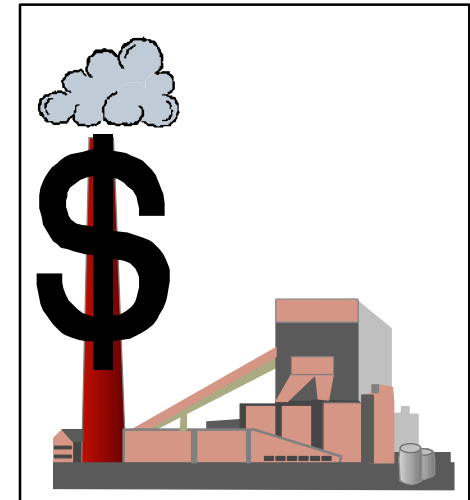
- ◆ Traditional air regulation
  - » state implementation plans (SIPs)
  - » emission rate standards (lb/mmBtu)
- ◆ Acid Rain Program (cap & trade)
  - » firm emissions cap (tons)
  - » allocation by fossil heat input, fuel type
- ◆ Offsets & set-asides
  - » isolated/small size
  - » high transaction costs





# Innovative Regulatory Mechanisms

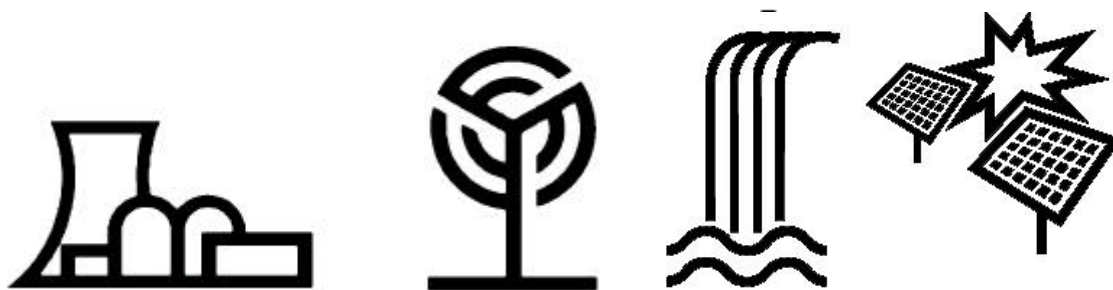
- ◆ Begin with cap & trade model
- ◆ Output-based standard (lb/MWh)
  - » fuel neutral
  - » rewards generation efficiency
  - » encourages CHP
- ◆ Broadened allocation
  - » include renewable output in allocation
  - » automatic credit; no application needed





# Forthcoming EPA NO<sub>x</sub> Output Rule

- ◆ Federal NO<sub>x</sub> output standard (lb/MWh) for eastern states\*
  - » states could adopt same allocation for SIPs
  - » proposed rule expected winter/spring 2001
- ◆ EPA will accept comment on whether to include output from non-fossil generators:
  - » nuclear power
  - » hydropower
  - » renewables



\*applies to Federal Implementation Plans and Sec. 126 compliance.



# Potential Future Cap & Trade Programs

- ◆ Mercury from power plants
  - » EPA announcement expected 12/15/00
- ◆ Carbon?
- ◆ 4-pollutant strategy
  - » bills by Jeffords, Leahy, Pallone, Kucinich, Waxman, Allen, Lazio
  - » concept endorsed by Pres. Clinton, VP Gore, GW Bush
- ◆ Acid Rain-type cap & trade likely model
- ◆ Allocation for renewables?





# Green Tags & Emission Credits: Apples & Oranges

- ◆ Different concepts; separate commodities
  - » emission credits are legal instruments
  - » green tags are a creation of the marketplace
- ◆ Cap & trade programs have prescribed boundaries
- ◆ Bundling possible, but can't be mandated

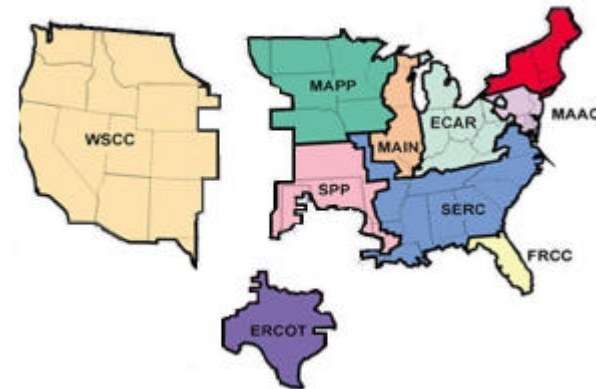






# Green Tags: Policy Issues

- ◆ Coordination with state RPS
  - » common data systems; avoid double-counting
  - » apply to every unit sold
- ◆ Coordination with state disclosure rules
  - » mandatory disclosure, incl emissions (“brown” tags too!)
  - » coordination *between* states
- ◆ Credibility with consumers
  - » public acceptance of tagging concept (tough sell?)
  - » observe laws of physics





# Role of EPA

## ◆ EPA data systems will support green tags

### » E-GRID database

- emissions & resource mix for entire power sector
- supports state policies (disclosure, RPS)

### » Allowance Tracking System

- records allowance transfers for SO<sub>2</sub>, NO<sub>x</sub>



## ◆ Analytical tools (forthcoming)

### » document pollution prevention thru displaced emissions

- emissions profile tool
- emissions impact analysis

## ◆ Rulemakings & policy guidance

# Role of EPA (cont'd):



## Support for Green Power Mkts

- ◆ Certification & accreditation
  - » e.g., Green-e
- ◆ Information
  - » encourage business & federal purchases
- ◆ Develop green power network
  - » partnerships with enviros, utilities, marketers
- ◆ Provide environmental recognition for green power purchases
  - » build credibility for green power products





# A Happy Marriage?

